

No. 163 August 1988

Ellendale

NEWS



100 Years of the Disc Record

The City of London Phonograph and Gramophone Society

A G M

NOTICE OF ANNUAL GENERAL MEETING

The ANNUAL GENERAL MEETING of this Society
will be held on
SATURDAY 24th SEPTEMBER 1988
at the Bloomsbury Institute,
4th Floor, Bloomsbury Central Baptist Chapel,
235 Shaftesbury Avenue, London W.C.2
commencing at 1.30 p.m.

NOMINATIONS ARE INVITED
for the Election of Officers and Committee Members.

They should be sent to the Hon. Secretary:

K. W. Loughland,
[REDACTED]

to reach him no later than 1st September 1988

THE PRESENT OFFICERS AND COMMITTEE,
as listed below,
offer themselves for re-election except those indicated as retiring.

President	George Frow
Vice Presidents	A.D. Besford, D.R. Roberts
Chairman	Ted Cunningham (retiring)
Vice-Chairman	Peter Martland
Secretary	Ken Loughland
Treasurer	Mike Field
Meetings Secretary	Ken Loughland
Committee	Tom Stephenson (retiring)
	Suzanne Lewis
	Frank Andrews
	Len Watts

REFRESHMENTS AND SOME ENTERTAINMENT WILL FOLLOW THE A.G.M.

The HILLANDALE News

The Official Journal of The City of London Phonograph and Gramophone Society
Founded in 1919

Editor: Peter Martland,

UK.

President George L. Frow
Chairman Ted Cunningham
Secretary Ken Loughland,
Treasurer D.M. Field.

MEMBERSHIP SUBSCRIPTION RATES

United Kingdom £7.00 per annum

Europe & Worldwide Surface Mail

£7.00 per annum

Airmail Worldwide (not Europe)

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CONTENTS

From the Archives	58
His Husky Voice, by George Taylor	60
Out-takes, by Frank Andrews	64
100 Years of the Disc Record, by George Frow	67
Busy-Bee Labels, by John A. Petty	68
5-inch Berliners, by Ernie Bayly	71
Record Processing for Improved Sound by Adrian Tuddenham and Peter Copeland	72
Letters	78
London Meetings	79
Reviews	80-81
Endurance Test, by Ted Cunningham	82

AS PROMISED IN THE JUNE EDITION of the "Hillandale" this edition marks the Berliner patent centenary. We have three offerings for your consideration on the subject: first our front cover, kindly supplied by Peter Adamson, is a photograph of a 5-inch zinc Berliner plate circa 1890. The second is in the form of two letters from the EMI Music Archive, from Berliner to William Barry Owen. The third is a contribution from Ernie Bayly.

Our President gives us an account of the opening of the National Sound Archive Exhibition. Whilst Frank Andrews begins an occasional series of out-takes omitted from his book "Edison Phonograph - The British Connection."

George Taylor has researched for us a most remarkable gramophone that went with Scott on his fateful expedition to Antarctica. His article tells us much about the men who went with Scott and the attitude of people in 1912 to the gramophone.

Its been a busy summer for anniversaries and I for one am still digesting the programmes produced by the BBC. I was aware watching and listening to them that many of our members contributed to their making. I am sure all our members would wish me to congratulate them for their fine work in placing our fascinating hobby before the general public.

Peter Martland

Front cover: A 5" Berliner, "Auld Lang Syne", c.1890-92: single-sided etched zinc - early leaflets offer it also in vulcanite. Picture and information from Peter Adamson, Page 63: This advertisement, supplied by Steve Paget, appeared in "The Sphere" in March 1901.

From The Archives



RUTH EDGE has kindly sent us two letters from the E.M.I. Music Archives to mark the Berliner centenary. She says "It was rather difficult to choose letters which made sense on their own, but I think readers will find it interesting just to note the style in which Emile Berliner expressed himself."

LABORATORY
of the
BERLINER GRAMOPHONE COMPANY

1410 Pennsylvania Avenue N.W.

Washington D.C. July 13 1897

Dear Mr. Owen,

I have yours of yesterday and am glad you are off with such a complete exhibit. As for Johnson I will remind Parvin of it today.

Now as soon as you have closed anything definite, your people should by Morgan & Co. & through Ripp's Nat. Bank here send on such a paper as I can sign and with it the preliminary deposit. In the meantime you can cable me so I can prepare myself to go over. The gramophone people could spare me but I am building a house and will have to attend to a lot of matters so they can finish up without me. I will within a day or two send the European patent papers to my brother in Hannover. He has always attended to paying taxes etc. for me and the papers might as well be over there. - I don't know whether you have planned things out completely but imagine you have.

A good way would be to start a syndicate of say 20 equal shares of say £5000 each. Such a proposition is a concrete plan and anyone can take one or more shares. The syndicate then buys the patents and processes from me and organizes a Co. reserving say 60% of the stock for themselves with the money on hand which can be paid in as needed (after paying for the patents) a plant is immediately established. What I mean is that a complete plan is preferable to first getting people interested and then plan the thing out. I did not hear from you regarding a.b.c.

Well so long! Bon Voyage and success! and hope you'll have a jolly time all around.

Yours truly, E. Berliner

THE UNITED STATES GRAMOPHONE
COMPANY

1410 Pennsylvania Avenue N.W.
Removed to 1023 - 12th St. N.W.

Washington D.C. July 30th 1898

Dear Mr. Owen,

I have yours of the 23rd Inst., and by the time this reaches you Mr. Williams and yourself Sanders and Gaisberg will have had a pow-wow on the situation and have come to final results. I am very sure that you will find Gaisberg a valuable assistant in your work. He has been carefully trained by me and the only thing that he might find difficulties in at first might be on account of the totally different climatic conditions in England against the United States. Judging however by the facilities with which records were made in Germany I do not anticipate that it will require much of adjustment to get as good results in England as here. The principal thing is that I can get Sanders back here as soon as possible and in that case I will be able to help you out later on if necessary.

I have carefully read all you say about record pressing and I am very sure that you undervalue the superiority of Burt records so far as his samples show over the Duranoid records. I hardly think that you have in mind the fact that after Duranoid records have been used 50 times they show an undoubted roughness and rapidly wear out and become anything but a recommendation of the Gramophone. The argument has been made that when records are worn out people will buy new ones but I believe

you will side with me in protesting to this as a dangerous plea. People should buy new records on account of the enjoyment they get out of the old ones and the longer these remain in good shape and are shown to admiring friends the better for the Gramophone business. It has taken me a great deal of diplomacy to get to the arrangement which I have made with Burt. He is a man way ahead of Duranoid and it was his suggestion which brought out the very highly important fact that we could go ahead making records with ready made material in sheets when we thought an expensive plant with steam rollers and long experiments in material and mixing would be necessary and would probably spoil the next seasons business.

I am not at all in favor of paying more for records than necessary but if Burt records wear only twice as long as Duranoid then I say most emphatically

let us pay two or three cents apiece more for them. Furthermore by Burts system the matrices are much better preserved than by the Duranoid system.

I note the serious objection of "Made in Germany" for England and there is no reason why a Plant cannot at once be erected in London and perhaps at the same time in Hannover. Would it not conform to the law if a label was pasted on the back of each record and the label removed with water after they have arrived in England.

Further experience in Record Making continue to show that while Mr. Child is now and then making some very fine records his average is sadly below mark but we have had very sure signs that New York looks now for the majority of good records to come from Washington.

Yours truly, E. Berliner

Principal Offices: 1410 Filbert Street, Philadelphia, Pa.

LABORATORY
OF THE

Berliner Gramophone Company,
1410 Pennsylvania Avenue N. W.

WASHINGON, D. C., July 13¹⁸⁹⁷

Mr. Oliver

I have yours of yesterday & I
do you are off with such a
big exhibit. As for Johnson
remained Parisian of it today.
as soon as you have closed
it definite, your people should
go on to & through Paris
and there send an such a paper
as you and with it the
many deposit. On the next time
a cable me so I can prepare
to go over. The Gramophone
caused some me but I am
to a house & will have to
to a lot of makers so they can
not hurt me. I will

Gramophone Co.
1410 PENNSYLVANIA AVENUE, N. W.,
Removed to 1023-12th St. N. W.
2. WASHINGTON, D. C.,

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s truly,

E. Berliner

His Husky Voice

by George Taylor

OVER THE YEARS a number of articles on Polar exploration and the gramophone have appeared in "The Hillandale News", the latest being the summary of Ruth Edge's talk in Hillandale 139, about the records given by the Gramophone Company to Scott's Antarctic Expedition of 1910-1913. I have surveyed several of the published accounts by expedition members to see what further information might be forthcoming about the gramophones and records sent south so long ago.

The Gramophone Company presented the expedition with two gramophones. The cover of Hillandale 139 shows a delightful photograph of a Senior Monarch with a husky dog posed à la Nipper gazing into the horn. Many records accompanied the party but unfortunately little detail of titles has survived. A list of ten titles is given in the article on Miss Edge's talk. What do the expedition members have to say?

The accounts I have drawn on are those of Scott himself; Dr. Wilson, the chief scientist and a close friend of Scott; Lieutenant Evans R.N., second-in-command; Herbert Ponting, the famous photographer; Apsley Cherry-Garrard, assistant biologist; and Sub-Lieutenant Tryggve Gran, R.Norwegian N.R., ski expert. Details of these references are given at the end of the article.

Before examining these accounts, however, some comments on the list of titles in the Edge article. For clarity I repeat the list, adding some more information.

		Cat.No.	1912	1918
1.	Love is meant to make us glad Margaret Cooper	3820	yes	yes
2.	The Prehistoric Man George Robey	2-2673	yes	yes
3.	Night Hymn at Sea Butt and Rumford	04046	yes	yes
4.	Abide with me Clara Butt	03179	yes	yes
5.	The Golf Scene (note 1) Huntley	B402	yes	yes
6.	One Fine Day (Butterfly) Geraldine Farrar (note 2)	2-053010	yes	yes
7.	We all walked into the shop Stanley Kirkby (note 3)	3-2283	yes	no
8.	I want yer ma honey Yvette Guilbert	3736	yes	no
9.	A Sergeant of the Line Barry Dearth	02230	yes	yes
10.	The Dollar Princess Black Diamonds Band (note 4)	2-462	no	no

NOTES

1. This record is listed in both the 1912 and 1918 catalogues as by Huntley and Carroll. Scott could not, of course, have actually taken B402, a double sided issue of 1915. He will have had the single sided issue, 1372.
2. This record has an interesting history. It was recorded in 1907 on Victor matrix C5055, and issued as HMV 053176. It was so catalogued in 1912 and 1918. However, it appears in the 1920 Opera at Home as 2-053010, so between the end of 1918 and 1920 the original recording was reissued with a new catalogue number. I have both issues and they do indeed seem identical; so why the new catalogue number, and why was this old-style number available in 1920?
3. This record is catalogued as by Walter Miller, not Kirkby.
4. Perhaps this record was in the Zonophone catalogue by 1912.

Most of the ten records were evidently popular as seven of them were still available in 1918.

Scott ran his expedition on naval lines, and the base hut was divided into areas for officers and scientists on the one hand, and NCOs, ratings, etc., on the other. Each group had its own gramophone (Evans) and, presumably, collections of records. It appears that both groups ran their gramophones simultaneously, playing different records. Evans again: ". . . the gramophone giving us Melba's records, and the ship's company's gramophone squawking out Harry Lauder's opposition numbers . . . one might easily have imagined this to be a circus arena in the great Antarctic joy-ride film." Certainly, records were not in short supply; Ponting says that "several hundred excellent records" were supplied with the gramophones. He goes on to say: "Only those who have lived away from civilization and its comforts can realise the pleasure such an instrument gives to those in exile," and Cherry-Garrard is rhapsodic on the same lines. "It is necessary to be cut off from civilization and all that it means to enable you to realize fully the power music has to recall the past, or the depths of meaning in it to soothe the present and give hope for the future." Wow! He goes on: "We also had records of good classical music (not soothing?) and the kindly-disposed individual who played them had his reward in the pleasant atmosphere of homeliness which made itself felt."

Scott refers only once to the gramophone and its records, under 19th January 1911. "Meares has become enamoured of the gramophone. We find we have a splendid selection of records." This appears to be the first time the gramophone was used, on the occasion when they first moved into the base hut. However, the gramophone quickly came into regular use. Cherry-Garrard: "It was usual to start the gramophone after dinner, and its value may be imagined." The instrument was kept on top of the pianola and "a home-made box with shelves on which lay the records" is mentioned by the same author. On Midwinter Day, 22nd June 1911, there was a celebration incorporating elements of Christmas festivities, and Gran remarks: "The day began with the gramophone playing; we kept this up till after lunch." Later, Ponting remarks: ". . . the gramophone started up a dance which - if the truth must be told - was performed by some with underpinning more than a trifle unsteady." Wilson "thoroughly enjoyed the gramophone", and being a skilled artist, recalls "drawing with gramophone going."

So the gramophone(s) certainly got extensive use - but what about details of the records themselves? Evans has already referred to records by Melba (and Harry Lauder). Gran again: "I spent some hours in the hut tonight, listening to our first gramophone concert: it was a delight to hear Caruso, Melba, and Tetrazzini, among other famous stars." Gran appears to have been a Melba enthusiast: "You can almost weep at the sound of Melba's voice."

Wilson is rather more specific. "The best thing on the gramophone is 'A Night Hymn at Sea' (one of the Edge records) . . . and 'Tis folly to run away from love' by Margaret Cooper. But we have a lot of other good things." The title of his Cooper favourite is not identical with that on the Edge list, but may be the same piece: I have found no other Cooper selection in the 1912 catalogue which would fit.

During the Antarctic winter, Cherry-Garrard had been a member of a party making an appalling trip to collect Emperor Penguin eggs, and was relieved to get back to base: "a broken record of George Robey on the gramophone started us laughing until in our weak state we found it difficult to stop." The Robey record may have been the one on the Edge list.

That there were quite eclectic items in the record collection is, however, suggested by some Norwegian items, perhaps a recognition by the Gramophone Company of the presence of Gran on the expedition. Thus Gran: "After supper we played the

gramophone and to celebrate my birthday (his 22nd, on 20th January 1911) some Norwegian melodies were included. It gave me a strange feeling." Later, 17th May, "In the evening I played 'Ja, vi elsker' (the Norwegian National Anthem) on the gramophone." The only other specific title mentioned by Gran is "Hark, the herald angels sing."

Caruso, Melba, Tetrazzini, Farrar, Butt, Rumford; Cooper, Robey, Miller, Lauder, Huntley and Carroll, Guilbert, Dearth; and the Black Diamonds Band, Christmas carols, and Norwegian tunes - quite a collection. I wonder whether Shackleton's "The Dash for the South Pole (01028) was released in time to be included in the records going south?

Appendix: "Record" Ski Wax

Gran, the ski expert, used a wax called "record" to wax the skis. Scott gives the composition: "a mixture of vegetable tar, paraffin, soft soap, and linseed oil, with some patent addition which prevents freezing - this according to Gran." Why was the wax called "record"? Was the composition based on that of the wax used in the recording blanks of the day?

WORKS CONSULTED

1. "Scott's Last Expedition", R.F. Scott, first published 1913 in 2 volumes. Vol.1 much reprinted. Printing used, John Murray, 1949.
2. "Diary of the Terra Nova Expedition to the Antarctic, 1910-12", Edward Wilson, ed. H.G.R. King, Blandford Press 1972.
3. "South with Scott", E.R.G.R. Evans, first written about 1921, new ed. Collins 1948.
4. "The Great White South", H.G. Ponting, first published 1921, third ed. Duckworth 1923.
5. "The Worst Journey in the World", A. Cherry-Garrard, first published 1922; edition used, Penguin 1948.
6. "The Norwegian with Scott. Antarctic Diary of Tryggve Gran", ed. G. Hattersley-Smith, translated E.J. McGhie (née Gran), HMSO 1984.

FORTHCOMING LONDON MEETINGS

Saturday 20th August, 6.00 p.m., Neasden Public Library, Neasden Lane, London N.W.10
REGAL RECORDS presented by Frank Andrews

Tuesday 20th September, 7.00 p.m., Bloomsbury Institute, Shaftesbury Avenue, W.C.2
PATHE IN BRITAIN, Part 2, presented by Len Watts

Tuesday 25th October, 7.00 p.m., Bloomsbury Institute, Shaftesbury Avenue, W.C.2
MORE MEMORIES OF AN IMPRESARIO, presented by Norman McCann

CITY OF LONDON PHONOGRAPH & GRAMOPHONE SOCIETY - BRANCH SECRETARIES

EAST FIFE	E.J. Goodall, [REDACTED]
SEVERN VALE	Lawrie Wilson, [REDACTED]
CHILTERNNS	S. Jellyman, [REDACTED]
MIDLANDS	G. Burton, [REDACTED]
NEWCASTLE	(Clockwork Music Group) P.Bailey, [REDACTED]
YORKSHIRE	P. Austwick, [REDACTED]
VICTORIA, AUSTRALIA	C. Gracie, [REDACTED]



NOTHING SUCCEEDS LIKE SUCCESS.

Did you ever know an article to succeed that did not possess great merit? The "Gramophone" has proved to the adage and is pleasing multitudes of people in every country and in every language on the globe. We are distributing yearly 3,000,000 Gramophone records throughout the world, in English and many other languages. We have established our own selling houses at Amsterdam, Brussels, Berlin, Barcelona, Buenos Ayres, Calcutta, Milan, Naples, Paris, St. Petersburg, Sydney, and Vienna. The FOUNDATION of our business is the violin, cornet, clarionette, flute, each and every instrument of the orchestra—even The Orchestra itself—the piano, mandolin, guitar, zither, concertina, and last, but not least, the HUMAN VOICE.

Is there any limit to our field? New music, new songs, new artists, make our catalogue always growing.



WE MAY SAY "OUR WORK IS NEVER DONE."

AN ACCIDENT

the other a "W.W.Y." "How you found out how it happened?" "Yes, the disc or plate repeat played on the gramophone, clear and separate, so you can have either selection you prefer." "Can it do it again?" "I think so." "We have been working for months to perfect this discovery. *SO WONDERFUL* is it that we wish to place it in the hands of everybody in the United Kingdom. The latest results has THREE SEPARATE, and DISTINCT records on the same plate—*a Grand Solo* and *a Humorous Solo* and *a Piano Solo*—and *a Humorous Talking Condition* all on the same plate.

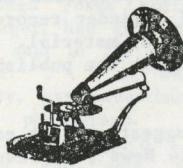
happened some time since in our laboratory. It was one of those peculiar accidents which have often happened to us in our work and research, which caused us to the diligent student some possibility beyond his expectation or even dream. Our expert brought us a record plate which he had tried it as usual, and to my surprise I discovered I had two distinct records on the same disc—one a *Grand Solo* and *a Humorous Solo* and *a Piano Solo*—and *a Humorous Talking Condition* all on the same plate.

After a few trials I found that the record would play on the gramophone, clear and separate, so you can have either selection you prefer."

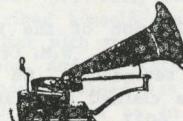
which selection you will produce when you put the reproducing Stylo needle on the record. Each sound wave extract from the beginning of the record and in any event all dealers in Gramophones will allow you to try on one of their machines—and Gramophone dealers are everywhere. We are going to give this plate away. The conditions are below the price.



2 Guineas.



3 Guineas.

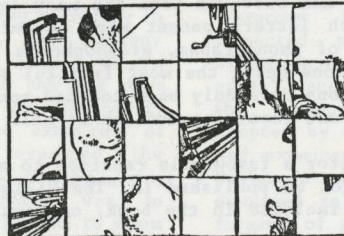


4 Guineas.



£5 10s.

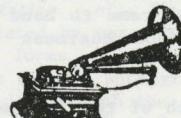
PUZZLE



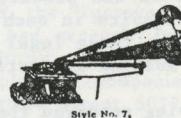
CONDITIONS.

If you will solve this puzzle by cutting out the squares in the above picture and pasting them properly on a card, and then sending the same to us, we will send you a special stamp for posting and packing, and we will send you the *Gramophone* Plate as described above. As our capacity for furnishing this plate is 1,000 a day, we shall file and number each solution and send in rotation those sent to same.

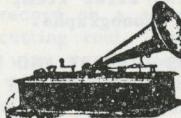
THE GRAMOPHONE REGULAR PLATE will not be sold until this offer is withdrawn. The price then will be **FIVE SHILLINGS**, which is double the price of the Regular Gramophone Record, namely, 2/6.



£6 10s.



£7 10s.



8 Guineas.



£10

A few of the LATEST RECORDS made for the

GRAMOPHONE.

1441 On Boarding Houses.
1442 On Travelling.
1443 On Pale.
1444 On Eccentricities.
1445 On Theatricals.

VOCAL, MALE.

1446 The Tuppenny Taylor.
1447 The Soldier's such a nice
young fellow.
1448 Australia.

VOCAL, FEMALE.

1449 On Traveling.
1450 Sweetheart May.
1451 How I Love You.
1452 I'm a Poor Husband.
1453 When I'm a Wife.
1454 When the Boys in Khaki all
go off to the front.
1455 Oh Mr. Johnson.

VOCALE, FEMALE.

1456 Whistling Serenade (Amanda).
1457 The Spanish Gypsy.
1458 The man that came over from
Ireland.
1459 Every inch a Soldier and a
gentleman.

VOCALE, FEMALE.

1460 Wilson Hallett.
1461 The Spanish Gypsy.
1462 The Man that came over from
Ireland.
1463 Every inch a Soldier and a
gentleman.

VOCALE, FEMALE.

1464 The Spanish Gypsy.
1465 Whistling Serenade (Amanda).
1466 The Man that came over from
Ireland.
1467 Every inch a Soldier and a
gentleman.

VOCALE, FEMALE.

1468 The Spanish Gypsy.
1469 Whistling Serenade (Amanda).
1470 The Man that came over from
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1471 Every inch a Soldier and a
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VOCALE, FEMALE.

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VOCALE, FEMALE.

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Out-takes

AN OCCASIONAL SERIES OF PIECES WHICH HAD TO BE OMITTED FROM THE BOOK "EDISON PHONOGRAPH - THE BRITISH CONNECTION"

by Frank Andrews

INTRODUCTION

MY HISTORY OF the Edison phonograph business in Britain, recently published by our Society, was based upon research which had been primarily concerned with the business in disc records of the Edison and Edison Bell companies in Britain, whose origins and histories I wished to know about. Such a wealth of material came to hand that I realised I could present a reasonable account of the Edison business in Britain as it concerned the talking machines and records.

Much of the factual material incorporated in the book is only to be found in the documentation which has survived from the many legal actions instituted during the period in which letters patent were extant which protected many aspects of the production of phonographs, graphophones, and cylinder records; the affidavits in such actions being the most fruitful source of material. Of necessity, those legal actions have only been touched upon within the published story, most of the actions not receiving mention at all.

Having received the Editor's favourable reaction to my suggestion that some of the unused material might be published in "The Hillendale News", I present below the first item, not included in the book, concerning the exhibition and sale of phonographs.

CHARLES J. KELBY AND WILLIAM E. YOUNG - LETTERS PATENT INFRINGERS

The Edison United Phonograph Company, formed on 24th February 1890 in Newark, New Jersey, USA, had taken over the Edison Phonograph Company in London and was prime mover in founding the Edison Bell Phonograph Corporation in November 1892, transferring all its Edison and Bell & Tainter letters patent over to it on 21st January 1893. Before this, on 10th January, the Edison United Phonograph Company caused a writ to be issued against the persons of C.J. Kelby and W.E. Young for infringement of its Bell & Tainter patent number 6027, which protected the invention of making a recording by cutting into wax. By the time the affidavits of those involved in the action had been signed, the patent had passed to the new Edison Bell company which became a co-plaintiff. There were four affidavits on behalf of the plaintiffs, signed on 23rd February 1893, and two on behalf of the defendants, signed on 8th March 1893. The action was before Mr. Justice North

in the Chancery Division of the High Courts of Justice in London. W.M. Crowe was Edison Bell's secretary. On his company's behalf he claimed proprietary rights in patent 6027, reciting its passage through former proprietors until its final registration to his company just six days previously, being of "full force and validity." Referring to Kelby, he said that on 4th January at 319 Strand, London, Kelby had, on payment of an admittance fee by the public, exhibited a phonograph made in accordance with patent 6027, had sold another to a Mr. MacArthur of Glasgow, and had since offered similar machines for sale. Crowe then stated that he believed W.E. Young was associated with Kelby in the same business, he having sold a similar machine earlier to Howard Collyer & Co. of Tothill Street, Westminster and, since the serving of the writ, had sold similar phonographs, one in particular to Messrs Rhodes and Sons of Silver Street, Halifax. And, continued Crowe, unless the court ordered otherwise, Young threatened to continue the sales of such phonographs, which had not been made

for Edison United nor for Edison Bell, nor were licensed by either. Point 8 of Crowe's statement I quote in full: "The said invention at the time when the said letters patent were granted was new and of great public utility, and the plaintiffs will suffer serious damage if the defendants be not by order of this honourable court restrained from selling or using same."

How did Mr. Crowe know that Kelby was exhibiting and selling machines at the Strand? Well, the Strand is but a short distance from where Edison House, office location of the Edison United Phonograph Company, was situated, in Northumberland Avenue near Trafalgar Square, and word must have reached them, for Gabriel Brossa, the secretary to Stephen Fossa Moriarty, the company manager, had gone along to 319 Strand and said in his affidavit thirteen days later: ". . . at which the defendant, Kelby, was advertising an exhibition of the phonograph. I examined the phonograph, which I saw in the shop, while the said defendant was in conversation with Mr. MacArthur, to whom he had previously sold it." Mr. Brossa described himself also as an electrician, familiar with the construction of phonographs, and he stated that the machine he had examined was identical to exhibit SFM2 referred to in his manager's own affidavit. Mr. Brossa continued that after MacArthur had left the shop Kelby had told him that he had three more such machines, which he offered at £150 each! Brossa then said he was offered them at £100 each when he objected to £150. Stephen Fossa Moriarty, the manager of Edison United Phonograph Co., had supplied one of his company's own Edison-built machines as a court exhibit, marked SFM1. He declared he had examined the Bell & Tainter 6027 patent's specifications of 1886, which had been amended in October 1890. He said he had examined the phonograph which MacArthur had bought from Kelby, marked SFM2, and said it was substantially identical to his company's own machine SFM1, containing all the material parts described and claimed in the patent, stating it had not been made by or for them, nor made under licence or under any other authority and, as such, it infringed his company's patent

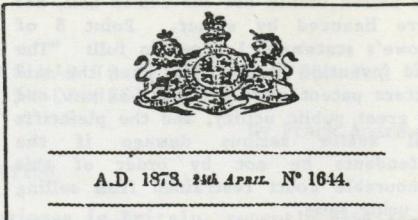
6027. Moriarty stated he had also examined the machine W.E. Young had sold to Howard Collyer & Co., marked SFM3, and again averred that the machine was similar to his own SFM1, but had not been made by or for his company nor made under any licence or authority from his company, and therefore it infringed his company's patent 6027.

The fourth affidavit came from John Hopkinson, FRS, MICE, a Past President of the Institution of Electrical Engineers. He stated he was acquainted with the many forms of phonograph, including Edison's original phonograph of 1877, as patented, in which the record was formed by indenting tin foil with a vibratory style. Hopkinson also inspected phonographs at the Paris Exhibition in 1889, the "Improved Phonograph", and he had recently inspected the "various forms of phonograph" adopted by the plaintiff companies. He had examined letters patent 6027. For Hopkinson the most important novelty disclosed in the specification was the forming of the record on a solid body by means of a cutting tool, instead of indenting a foil with a vibratory style or by cutting a strip by vibrating against it a revolving disc cutter. He found in the three exhibits that the records were made with "the cutting action of the style - being obvious from its form", and he had no doubt whatever that exhibits SFM2 and SFM3 were in infringement of the patent.

William Lynd was one of those who came to Kelby and Young's support, with an affidavit dated 8th March 1893. He had already lost his own defence against Edison United on 18th February, as my book relates on page 12. He described himself as a consulting electrical engineer who for several years had been a member of the Institution of Electrical Engineers, was the author of "Practical Telegraphist" and of other works in various branches of physics, making the laws of sound a special study. He had been acquainted with the phonograph since 1877 and had written and published "Edison and his Perfected Phonograph". He had an intimate knowledge of every modification made to phonographs and graphophones introduced

up to August 1892. Having stated that he had examined the Young-sold machine, Lynd said, positively, that it, and other machines, were not constructed to the specification of 6027 but were to Edison's defunct patent 1644 of 1878. He then went on to claim that cutting into wax was not novel at the time of the Bell & Tainter patent of 1886, giving as an example that when indenting stylus were used on wax surfaces not covered by tin foil, scratches or cuts resulted.

The other person to assist Kelby and Young in their defence was the ex-manager of the former Edison Phonograph Company in London, Jonathan Lewis Young. If there was any family relationship with William E. Young I have no knowledge of it. Jonathan Young was living at Walthamstow at that time and was trading from Fore Street as the J.L. Young Manufacturing Co. Ltd. and as the Edison Phonograph Company later, with Lynd as his manager. Jonathan Young's affidavit, of 8th March, stated that he had read all four affidavits in support of the plaintiffs and was thoroughly familiar with all types of phonographs, whether manufactured in England, America, or on the Continent. Having examined specification 6027 he stated it did not disclose any new invention and he reiterated Lynd in saying the invention described was "well known and had been frequently published in this country for many years prior to the said letters patent." He then went on to quote Edison's 1878 patent 1644, referred to an article on a phonograph in "Engineering" of 18th April 1879, and another in "La Nature" of May 1879. Patent 6027, he said, revealed no improvements whatever to what was already well known at the time it was granted. Jonathan Young then declared: "The phonographs sold by the defendants are manufactured in America, in accordance with the patent there granted to the said Thomas Alva Edison. Neither of the plaintiff companies manufacture Edison phonographs, in fact they have neither of them manufactured or sold any phonographs in the (this) country." (This was true at the time J.L. Young made the statement, as first deliveries were still awaited.) J.L. Young's last point is worth quoting in full: "The formation of the record on a solid body by means of a cutting tool



was so well known, prior to 1886, that I have no doubt I shall be able, before the trial of this action, to enable evidence of the repeated publication of such method in this country. I am in constant communication with the said Thomas Alva Edison, who is intimately acquainted with every improvement in connection with phonographs from time to time published in this country and elsewhere, and I can state, on his authority, that the employment of a cutting tool for the purpose of forming a sound record on a solid body was well known in this country prior to 1886 and, in fact, he claims that it was comprised in his specification No.1644 of 1878. I have no doubt that the defendants at the trial will be able to obtain his evidence on this point and, through him, to obtain numerous instances in which such invention has been published in this country prior to 1886." Although I did not follow this action through, I know that it was for an injunction to stop Kelby and Young from dealing in phonographs in any manner whatever. The attack on the patent 6027 not only failed in this instance, but in all other actions where its validity was brought into question.

J.L. Young himself had been issued with a writ on 8th February 1893 for infringement of patent 6027 which did not come to trial until 15th June 1894, when no-one appeared for Young as the defendant. Later in the year he was served with another writ, then for infringing the British Edison patent 19,153 of 1889 which had the claim for attaching both the recording and the reproducing point to the diaphragm. The action, held in the Queen's Bench Division, was of such interest as regards points of law that it merited a report in the published reports of "Patent, Design and Trade Mark Cases" and went to the court of Appeal.

100 Years of the Disc Record



by George Frow

IN SPITE OF Emile Berliner's patent of November 8th 1887 for "an undulatory line of even depth in a travelling layer of non-resisting material" (German Patent 45048/United States Patent 372,786) which the Society marked last year at the Hatfield Symposium, the rest of the world has celebrated his Disc Record this year.

The Centenary on May 17th was marked by the opening of an exhibition of the story of the disc record and its machines by HRH Princess Margaret at the National Sound Archive, 29 Exhibition Road, London SW7. Luckily for this Royal recognition, this was one of the warm spring evenings we had this year, and pleasant it was to mingle with friends from all parts of the recorded music business. The Director and staff of the Archive had worked until the last moment to make it a memorable evening for everybody. While I understand the display will be open "for an indefinite period", an early visit is advised, and later I hope to write upon it in detail.

The disc record and its history is, of course, ideal radio material, and in the recent series on BBC Radio 4, "Revolutions in Sound", Jeff Link has grasped the opportunity presented by six half-hour programmes to feature quite a number of performers, collectors, and people behind the scenes; and many extracts from recordings, from Berliner himself to Compact Disc, in several cases accomplishing the almost impossible of finding "lost" and extremely rare recordings. A happy series deserving of more mention than can be given here, and I understand it has fathomed further ideas for the future.

The television presentation "Memories of a Musical Dog" almost achieved the quart in a pint pot, with an hour-long history of the Gramophone, but suffered some lack of depth in achieving this. There was a linking character in the form of Nelson, a likeable crossbreed bull terrier, who peered Nipper-like into gramophone horns, but never resembled him much, for the smooth fox terrier of

Nipper's type is unfashionable and not seen around us these days. The tin-foil phonograph and the Florence Nightingale and Trumpeter Landfrey cylinders started the show off, and again a number of gramophone performers, historians, technicians and collectors were interviewed, reminisced and demonstrated machines. Several advertising records were played against similar promotional films of the day, and some of the vintage film made at the Hayes factories brought much to the feature.

Naturally a programme like this, going out at a peak viewing hour on BBC1, has to appeal to millions of viewers, and I suppose will be the nearest we can ever expect to a television history of recorded sound. It is a pity it could not be expanded into a short series embracing the whole British record industry from the beginning.

Several members of this Society made appearances and did well with their contributions. Jeff Link was again involved, this time as associate producer.

HISTORY OF THE CRYSTALATE COMPANIES

Frank Andrews wishes to advise the following correction to his history of the Crystalate Companies published in Hillandale News No.135, in December 1983. On page 295 the second paragraph should read as follows:

"The Imperial Record catalogue series, as far as new recordings were concerned, would appear to have begun at No.1031 with the matrices generally continuing the numbering in use for the "Ye Popular" Records. The lowest catalogue number used on Imperial Records was 817, so the 214 discs encompassed between 817 and 1030, inclusive, were all repressings from matrices earlier used for Popular, Chappell, Olympic and Bulldog Records."

Busy-Bee Labels

by John A. Petty

BUSY-BEE RECORDS were sold by the O'Neill-James Company of Chicago, which was organized in April 1904 by Arthur J. O'Neill, Winifred B. James, and Sherwin N. Bisbee. The company sold both cylinders and discs. All cylinders were from Columbia matrices, and the Columbia serial number may be observed near the edge of the title end. A few low-numbered Busy-Bee cylinders were special recordings by Columbia for the O'Neill-James company and are so announced. The Busy-Bee cylinder mandrel was slightly larger than the standard size which discouraged playing other brands. It also resulted in thinner wax walls and easier breakage.

The Busy-Bee disc has a standard size centre hole, but also an off-centre hole which fits over a protrusion in the turntable. Thus, to play other than Busy-Bee discs on an O'Neill-James Talking Machine it was necessary to cut a hole in the record or remove the off-centre protrusion. Several companies supplied records to the Chicago-based firm, mostly one-sided, but some double-disc pressings from Zonophone have been observed. There were three diameters: seven, ten, and ten-and-a-half inches. In reference to these sizes, the various label designs, and the four companies mastering discs for Busy-Bee, the following comments are made.

Busy-Bee labels are about the same size regardless of record diameter or the parent firm. Just above the title block, the base of the beehive contains the firm name on American and Columbia pressings, but this space is blank on Leeds-Catlin and Zonophone products. Leeds-Catlin labels are cut off along the bottom line of the title block and are sometimes affixed at an angle to the off-centre hole. Perhaps the labels were not applied prior to the time the extra hole was cut by Leeds-Catlin, but Columbia, American, and Zonophone which use full-round labels, cut through the paper and disc at the same time. Leeds-Catlin and a few American have sharp corners in the extra hole. Full

round labels have rounded corners in this hole.

Three types of back stickers have been observed and Leeds-Catlin is unlike the other record firms. A small black with gold lettering is most common, but a few are white with black printing on the Leeds-Catlin. The message is the same on both and states the record may be used on Victor, Columbia, and Zonophone machines and all others licensed under U.S. Patent No.534,543 in replacement of any worn out or broken records. Busy-Bee discs from Zonophone and some from American matrices do not have back stickers. Those which do and all Columbia mastered discs have the sticker which does not name Victor, Columbia and Zonophone.

Nine Busy-Bee labels and three restriction back stickers are illustrated, and they will now be discussed individually.

No.1 No.80 is a seven-inch Leeds-Catlin from matrix 16031-8311D. All Leeds-Catlin issues have the numbers embossed in reverse. The artist, Dan W.

NOTICE.

This record is manufactured under certain patents and licensed or sold subject to conditions and restrictions as to the persons to whom and the prices at which it may be resold by any person into whose hands it comes. Copies or duplicates must not be made from it.

No sale is authorized and no license is granted to use this record when sold below our current catalogue or current list prices as may be established from time to time.

A purchase is an acceptance of these conditions. All rights revert to the licensor upon a violation thereof.

Any violation of any such conditions or restrictions makes the seller or user liable as an infringer of said patent.

This record is licensed for use only with that type machine on which the turn table is arranged with a projecting lug to fit in the rectangular hole provided in the record. No authority is contemplated or conferred to use it with a machine of any other type nor will the licensor be responsible for such use.

This record is sold by the manufacturer upon condition that when sold by dealers to the public it must be sold at not less than the regular list price, and upon the further condition that the record shall be used only for the reproduction of sound directly from the record. This record is sold for use on all mechanical feed-device machines and upon all licensed Victor, Columbia and Zonophone machines and all other machines licensed under U. S. patent No. 534, 543 in replacement of any worn out or broken record thereof. Any other use of this record will be a violation of the conditions under which it is sold and an infringement.

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Quinn, is not identified. The back sticker is black and gold as illustration C. The record is unannounced and has piano accompaniment.

No.2. No.2716 is a ten-inch disc from Leeds-Catlin matrix 11-44856-8639D. The artist, Andrew Keefe, is not identified on the label and although the record is announced, the name of the artist is not given. The "Uncle Josh" monologue is unaccompanied and was made by Andrew Keefe during the time that Cal Stewart, originator of the Uncle Josh Weathersby character, was under exclusive contract with Columbia. Back sticker is as illustration C.

No.3. No.A-116 is a ten-inch Leeds-Catlin from matrix 45504-9016D. This "Uncle Josh" monologue is by Cal Stewart, made after his exclusive contract with Columbia. It is unannounced. Like the two above, this one has the cut-off label and the sharp-cornered off-centre hole, with "O'Neill-James Co. Chicago, Ill." missing at the bottom of the beehive.

No.4. No.145 is a seven-inch disc from the American Record Company, matrix 552. It is a sample of the cut-off label with sharp cornered hole and no back sticker. Title, artist and record number are rubber-stamped in blue. It is somewhat unusual among discs issued from American matrices which more often are found with full labels and rounded off-centre holes. It is unlike the cut-off Leeds-Catlin labels in that

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the company name is on the beehive.

No.5. No.1219 is a ten-inch American Record Company matrix, number 031219-819, by Arthur Collins, with orchestral accompaniment. The first number, beginning with a zero, is the serial number for the American Record issue and the Busy-Bee number is the last four digits of this American serial. The title and other information are rubber-stamped in blue. The three-digit number is probably the matrix. This record is announced by the artist and is recorded at the unusual speed of about 67 rpm. There is no back sticker.

No.6. No.1032 is a ten-and-a-half inch American Record Busy-Bee issue. The master serial issue is 031032, but a three-digit number is not shown. Again, the Busy-Bee serial is the last four digits of the American issue number. The selection is announced and, interestingly, is identified as an "American Record" in the announcement. The label information, which does include the artist's name, is rubber stamped in blue. The back sticker is as shown in illustration A.

No.7. No.2712 is from a Columbia master. Busy-Bee Columbia issues probably came from the Hawthorne and Sheble Company of Philadelphia, PA. The discs are numbered in the Star series, and have all Columbia matrix information removed. However, aural comparison of this disc with the Columbia matrix 1518, take 5, shows that it is the identical



pressing. The label information, which correctly identifies the artist, is printed in red, and the back sticker is type A.

No.8. No.2263 is the same type as No.7 above, but the artist, Bob Roberts, is not identified on the label. It is from Columbia matrix 3418.

No.9. No.A332 is from Zonophone matrix 6970. The Zonophone single-face issue was serial 625. Complete information is printed on the label in red, but the off-centre hole cut out the Busy-Bee serial number and it has been rubber-stamped in blue just to the right of "YOU" in the title. The beehive omits the company name, and there is no back sticker.

BACK STICKERS. Type A is the one on issues other than Leeds-Catlin. Types B and C are found on Leeds-Catlin Busy-Bee discs, with C the most common type.

These observations have been made from a limited number of discs - about 25 - and they are not intended to be completely representative of all Busy-Bee disc issues. The small collection does not include any double-face issues, which are quite rare. The company shifted its interest to products other than phonographs and records shortly after the advent of double-face records. Comments from collectors who have samples of double-face issues would be interesting.

5-inch Berliners

by Ernie Bayly



I WAS VERY INTERESTED in Frank Andrews' article on small-diameter records. In 1974, when preparing the guide to the then EMI collection of gramophones and phonographs, I spent much time examining, researching, and listening to 5-inch Berliner discs. I suppose I handled over 50 different titles from various collections.

The 5-inch Berliners appeared at the suggestion of the Kämmer und Rheinhardt firm who approached Emile Berliner in 1889, and correspondence existing in the EMI Archive in 1974, involving Joseph Berliner, verified that a succession of different titles was available until he bought up all the 5-inch discs and Gramophones that still existed at Kämmer und Rheinhardt, ready for the introduction of 7-inch discs into Europe at the 1897 Leipzig Trade Fair. At about that time, Gramophones and 7-inch discs imported from U.S.A. were being sold from rooms in the Hotel Cecil, London, by staff of what became The Gramophone Company, among whom John Watson Hawd was prominent.

The first 5-inch discs were pressed by the Rheinische Gummi und Celluloid Fabrik in Neckarau (near Mannheim) and an inscription to this effect is pressed on the otherwise blank reverse. They appeared to have more celluloid than those coming later. The second type was black, presumably more or all vulcanised rubber with no imprint upon the reverse, which was completely plain. The third type was equally black. This anagram was pressed into the front, but some of the lower catalogue numbered discs had it "rubber-stamped" only on the label on the reverse which contains the words or title. The colour of ink is that shade of violet which was formerly very much used for rubber stamping. There is no way of

knowing whether types two and three are from the same pressers, but appearances suggest that they were.

Because Kämmer und Rheinhardt's business was principally high-class dolls (in fact right up until 1940 when their factory was taken over by one A. Hitler & Co. for other purposes) I researched German dolls (the inanimate type), Kämmer und Rheinhardt's in particular, in various books. I came to the conclusion that at the early period of the 5-inch Berliner discs K.u.R. were "buying-in" the heads for their dolls, even if later they made their own in both the pink and sunburnt varieties. I looked at German patents on dolls. I then waded through the German trade-marks registers from as far back as I could go (I think it was mid-1870s) to 1895 looking for a firm which could mould or press in a material the same or similar, irrespective of what article, to that of the little discs, located in Walterhausen or which had its offices there. My belief was that the anagram on the last type of disc is that of the firm which actually pressed that type. Eventually I found reference to the firm T or J.D. Kestner* (Jun.) in Waltershausen which in 1889 was granted a trade mark to be applied to rubber toys. Thus I humbly submit that the K C G F on the anagram stands for Kestner Celluloid (und) Gummi Fabrik and that is the firm which pressed what I term the second and third types of Berliner discs as sold by Kämmer und Rheinhardt.

I had hoped to visit the German Democratic Republic to investigate old printed matter which might substantiate my theory, but various things have prevented it to date. Perhaps one of your readers in either of the Germanys will be able to continue researching where I have left off.

G		E R S	F
		E	
N V H	M	L T V	
K	N E S	C	

* The German trade-marks directories for the relevant period are printed in the old Gothic lettering. An ink smudge caused me to be uncertain whether the initial was T or J.

Record Processing for Improved Sound

by Adrian Tuddenham and Peter Copeland

PART 2 - ELECTRICAL TRANSCRIPTION

MONO FROM A STEREO CARTRIDGE

THE MODERN stereo cartridge contains two independent electrical systems, both fed from a common stylus; on the back it has one pair of terminals for each system. The stylus is free to move from side to side or up and down or at any angle in between. It can thus accommodate lateral cut discs, hill and dale, and stereo, which is a mixture of the two. In the case of stereo, for which it is primarily intended, a movement on one diagonal (i.e. 45°) should produce a voltage across one pair of terminals and nothing across the others. The other pair derives its signal wholly from the opposite diagonal. Each pair is connected to a separate amplifying channel and loudspeaker. By this means, movement of each groove wall produces sound in only one loudspeaker, and the two independent channels are carried by one groove.

In order to use this arrangement for monophonic records, the two channels are joined together so that they become one. The connection most often used is "series" (like fairy-lights in a chain) rather than parallel (like several electrical appliances plugged into one adaptor), although there is a case for this method too. Depending on the relative senses of connection of the two channels either horizontal movements will add, with vertical ones cancelling (giving a lateral response) or vice versa (giving a vertical, or hill and dale, response). If the first attempt responds wrongly, it is only necessary to interchange the connections on one of the pairs of terminals.

When the manufacturer of a stereo system has included a "mono" switch, it will not operate directly on the cartridge but further along the amplifier chain, to add the two signals to give a lateral response. Provided all four wires have been brought down the pickup arm, and the two which ultimately both go to

earth in the amplifier have not been combined, a simple reversal switch in one pair of wires will suffice to change from lateral to hill and dale and back. Be aware when fitting this that the cartridge body is sometimes earthed through the earth wire of one of the pairs, and if this happens to be the pair you intercept and reverse, then handling the cartridge will produce hum, crashing noises, and even radio signals in the loudspeakers. The switch should be screened (surrounded by earthed metal) and any additional wiring kept as short as possible, and away from other internal wiring of the unit. Alternatively, cartridges already wired for either lateral or hill and dale can be purchased from Expert Pickups.

For experimental work, the two channels are simultaneously added by one device and subtracted by another, so that four signals are available to subsequent circuitry, viz. Left, Right, Vertical, and Horizontal. The devices used are termed sum and difference amplifiers.

Amplifiers and Equalisation. Strictly speaking an amplifier is a device which uses an external source of power to increase the strength of signals fed into it. The term is used loosely in the paragraph above because the signal coming out of a sum or difference amplifier may be no stronger than that going in, but because the device used to perform this function is capable of amplification when required, the same term is used.

It will be apparent in an audio system which is in the form of separate units that there are two types of amplifier; a "pre-amp" and a "power-amp". It is the pre-amp which deals with incoming signals at low levels such as those directly from a pickup. These weak signals are amplified by special low noise circuitry to a level where the noise contribution of any subsequent circuitry is negligible.

Most preamps (including those which are built into modern equipment and not visible from the outside) include the tonal balance or "equalisation" components necessary to correct for the bass reduction and treble boost applied during record manufacture. They are needed only for disc recordings and would sound odd on other sources. This is part of the reason why separate "gram" or "phono" input sockets are provided. The degree of correction is now an internationally agreed standard (R.I.A.A. - Recording Industries Association of America) which applies to all microgroove discs cut since 1956. Before that time there were several different standards, and before that every manufacturer did what he felt was best (or easiest) most of the time. Acoustic recordings are anybody's guess. It follows that the equalisation characteristics of the pre-amp must be adjustable if the best results are to be obtained.

The equalisation characteristic is defined in terms of the "turnover points", the frequencies at which the treble cut and bass boost begin to take effect, the middle frequencies being amplified with no change. Above the "high frequency turnover" the amplification is arranged to decrease as the sound rises in pitch, so as to counteract the increase in the recorded strength of these frequencies. Below the "mid frequency turnover", amplification is increased as the pitch falls, boosting the bass sounds up to their proper strength, and counteracting the reduction which was necessary to prevent the grooves breaking into each other during cutting. Whilst it is positively beneficial to continue the high frequency attenuation so that sounds above human hearing are reduced to almost nothing (simultaneously reducing surface noise), the continuation of ever-increasing bass boost into the sub-audible range will overload the amplifier with mechanical noise and disc warp. Accordingly a third turnover, the "low frequency turnover" is defined as the frequency below which no further bass boost is applied. Add-on units with switchable turnover frequencies are available but they must by-pass the existing equalisation or some frequencies will get boosted twice. A purpose-built

switchable or variable "equalisation amplifier" is the best solution, but they are hard to find. Sometimes processes need to take place before equalisation, so they will require a pre-amp which simply increases the strength of all signals equally, the equalisation taking place in another circuit later. Placing an ordinary equalising pre-amp after the processor would not be very successful, as the background noise of all the devices in the processor would be amplified along with the signal.

The power amplifier, as its name suggests, develops the power necessary to drive the loudspeaker: the requirements here are the same as for any good high fidelity system.

Tone Controls and Filters. Whereas the equalisation of a known recording characteristic is an objective process, tone controls and filters tend to be subjective in their use. It is generally regarded as good practice to listen to the recording after all the objective processes are complete, and only then to decide whether any further treatment is necessary. In archiving work there must be a very strong and carefully considered case before the use of filters can be condoned. For entertainment purposes the situation is much more free, and individual preference decides what is, or is not done. It is still a good idea, though, to keep an objective copy of any re-recorded work for future reference.

When electric disc reproducers first appeared, a replacement was offered for the "sock" in the form of separate tone and volume controls. Since then almost every kind of record playing device has had some sort of tone control.

Tone controls serve two purposes. One is to correct for deficiencies in the tonal balance of the recording after proper equalisation has been applied; the other is to remove or attenuate unwanted sounds such as scratch. There is, however, a limit to what can be done to reduce noise by this method. If the noise frequencies are different from the wanted sounds it works well; otherwise you lose part of the sound, or cannot touch some of the noise. Hiss, clicks,

pops and most other sorts of record noise are "broad spectrum", that is, they contain sounds over a very wide range of frequencies. Some of these sounds extend a long way above the highest recorded frequencies, and can successfully be removed by a tone control without noticeably affecting the recorded sound. Others are in the same frequency range as the wanted sounds, and cannot be discriminated against. Turn a tone control down too far and the sound becomes muffled. Actually the tone controls can serve a third purpose; that of compensating for deficiencies in the loudspeakers and listening room (and the listener) but, of course, no self respecting enthusiast ever admits to that.

The tone controls on domestic equipment are an economy version of a class of devices known as filters. Some really good equipment contains other filters too, but the best ones usually have to be purchased as separate items. They come in four types: low pass (or top cut), band pass, band stop, and high pass (or low cut). For hiss removal we are most interested in the low pass type.

Ideally a filter should accept the wanted band of frequencies without distorting it, and reject the unwanted band absolutely. The transition from one to the other should be as sharp as possible and easily adjustable in frequency to suit circumstances. Unfortunately it is an unavoidable property of all filtering processes, however they are performed, that a sharp transition results in spurious effects in both the wanted and unwanted frequency bands. It can give rise to hollow sea-shell noises, and impart a pingy "ringing" quality to some tones, making the remaining scratch sound more obtrusive than ever. The transition has to be a carefully controlled progression, the actual definition of which is shrouded in layers of impenetrable mathematics and named commemoratively. The type known as "Butterworth" is often recommended as the best compromise between sharpness and ringing for audio work.

Unwanted sounds below the lowest musical frequencies, such as bearing and gear noise in the cutting machine, can

similarly be removed with a high pass filter, although there are those who consider that a certain "ambience" is also lost, making the record sound too dead. Replay turntable rumble is best dealt with at source.

Combined band pass and band stop filters form the basis for a useful device. Designed as a group, each of which selects a fairly narrow band of frequencies throughout the sound range, and arranged to be controlled by a row of slider knobs, it is known as a "Graphic Equaliser." As each control is slid up or down to boost or cut its particular range of frequencies, the positions of the knobs in a row resemble a graph (or, more accurately, a histogram) of the frequency response curve they are imposing on the sound.

This is especially useful for acoustic records. When the record was being made, by selecting an appropriate combination of sound box and horn for a given sound source, in theory the recording engineer was able to arrange for the resonant peaks of one component to compensate for the dips of the other, and an overall natural sound resulted. Many recordings exist where this was not successfully accomplished, and the graphic equaliser can then be used in an attempt to continue the work of the recording engineer by making further, more easily controlled corrections. The higher and lower frequencies which were usually recorded weakly can be judiciously increased at the same time. High quality equalisers can split the sound into as many as 26 bands: their cost is not trivial but once the art of "driving" them is mastered their beneficial effect becomes addictive.

Band stop filters can also be used to "notch out" a single unwanted frequency. With the possible exception of cutter needle oscillation at the end of small diameter records, and hum, such a single interfering tone is rarely found on commercial records. If it varies in frequency it can reappear at the side of the notch, and if it is not a pure tone a separate filter has to be used for each harmonic. These difficulties can be overcome by "digital filtering", of which more later.

A variation on the graphic equaliser is the "Parametric Equaliser." It is a group of filters (often four) which can be arranged to boost or cut very narrow frequency bands. These bands can be controlled in width, frequency and strength: they are used for correcting sharp resonances which are much narrower than the bands of a graphic equaliser. They have to be tuned accurately and matched to the resonance, and are difficult to use. A musical ear is needed to do them justice but when they are right the sound suddenly "comes into focus", always assuming that the parametric equaliser is the right tool for that particular job!

Special versions of all these filters exists, whose behaviour can be controlled electronically so that, for instance, they only let through high frequencies during loud sounds, but close down on quieter passages where scratch would be a nuisance. This must not be carried too far or bursts of noise "behind" the signal become obtrusive.

For the enthusiast who can cope with a limited amount of electronic construction work and wants an easy, non-mathematical approach to designing a filter, the "Active Filter Cook Book" by Don Lancaster (Published by H. Sams and available in the U.K. through Farnell Electronic Components of Leeds) is recommended.

Possession of a filter (which probably took a lot of trouble to make, or was quite expensive) is not sufficient justification for using it on all possible occasions. Each "subjective" item in the audio chain should be provided with a by-pass switch enabling comparison to be made with and without that item: the honest enthusiast will be amazed how many times "without" sounds better. In the past, the over-use of filters by professional record companies who ought to know better has resulted in some very murky transfers of 78s. There are other, better, ways of dealing with certain types of scratch than by taking away half of the music too.

Magnetic Tape. These days the concept of tape recording immediately brings to mind the Compact Cassette. Whilst this

format is undoubtedly very convenient, cheap, and almost universally available, it is most unsuitable for editing and other creative use. For these purposes open reel tape, usually half-track at $7\frac{1}{2}$ inches per second, seems to be the preferred standard. A copy to cassette can always be made for convenience later, but it will save the beginner a lot of frustration and wasted time if open reel tape is used from the very start.

Tape has many uses for the record enthusiast. It can be used to record irreplaceable discs which would otherwise be played frequently: a "difficult" disc which needs a lot of trouble to get the best results can be taped once and for all. Sending valuable discs through the post or by carrier is a traumatic experience but if the sound is all that is required, a tape is the easiest answer, and another can always be sent if the first is lost. If work is being submitted to a broadcasting authority, or many copies are to be made for distribution, open reel tape is usually the only acceptable medium.

The use of tape for changing speed and reversing the direction of play has already been mentioned. Speed change is obvious: most good open-reel tape recorders offer several speeds, each being twice as fast as the previous one. Each speed step produces an octave change in pitch, so beware that pickup arm resonances, hum, and motor noises don't become obtrusive when they change pitch too. Unless you are going to equalise after the tape, remember that your equaliser must also be capable of shifting an octave: few are.

Reversing direction by tape requires some further explanation. In professional studios machines which recorded across the full width of the tape were formerly used. Rethreading the tape with the top edge at the bottom (you can't turn over the other way because it is only coated with recording material, "oxide", on one side) and exchanging the spools which will now have their other flanges up, allows the tape to be played in reverse. More modern "half-track" stereo machines will also do this although the channels come out transposed. For economy of tape most domestic machines record mono

half or quarter track. When the tape is turned over the reversed track is on part of the tape which the replay head does not scan. The quarter track machine (or four-track machine, as it is also known) records two of its tracks in the area which a half track machine will scan in the opposite direction; so by recording on one type of machine and playing back on the other, a reversal can be obtained. If a lot of reversal work is anticipated then a machine adapted with an extra replay head mounted upside down becomes worthwhile.

Tape also offers the easiest solution to joining up record sides in long musical works. Provided care is taken with the musical pitch, frequency response, and volume levels, it is often possible to make the join completely undetectable to the ear. Unfortunately many disc changes involve an overlap or, worse still, the sort of situation where, if the join were marked on a full musical score, it would form a zig-zag line down the page. To cope with this means mixing the two disc sides together for a second or two. A twin-track recorder is virtually essential here: given that the machine has suitable recording switching and monitoring, alternate sides can be recorded on alternate tracks with the appropriate degree of overlap. If the sounds of the pickup entering and leaving the grooves are subsequently erased, correct continuous reproduction will be achieved by playing back both tracks simultaneously as mono.

Tape can be used for removal of unwanted noises by editing. The offending sound is located and marked on the back of the tape with a "Chinagraph" pencil. Using a grooved block to hold the tape in alignment, it is cut in two places, the noisy length removed, and the remaining ends joined with a special splicing tape. (The use of other methods of joining the tape, sometimes practiced in dire emergency, will eventually cause trouble from creeping adhesive gumming the layers together on the spool or jamming in the mechanism on replay.) The recording is shortened slightly: some of the wanted sound is inadvertently removed, and the rhythm may be upset. If a large number of brief noises require removal the

amount of tape lost by this method would be excessive.

Erasure of the unwanted region of tape by magnetism is much more precise and leaves a short silence. Provided this is infrequent and very short it will not be noticed. The use of a permanent bar magnet for erasure is unsatisfactory as it will leave a thump and can disrupt too large an area of tape. A better method is to mark the sound, as before, and place the marked area against the front of the erase head. To prevent unwanted noises being recorded, slip a piece of card between the tape and the recording head. Switch the machine to "pause" + "record" and move the unwanted region past the erase head by hand. (The actual point of erasure is the centre line of the shiny front of the head where a minute vertical crack, the "gap", may be seen.) Switch back to "play" and remove the card: at slow speed a noise-free gap may now be audible but at normal speed the sound will seem unaffected although the click will have vanished.

De-clicking tape has been raised to a fine art by John R.T. Davies, as any audition of re-issues he has produced by this method will reveal. His method, which he refers to as "decerealising", warrants detailed description as it is the most effective one in commercial use to date.

A single track full width tape recording at $7\frac{1}{2}$ i.p.s. is made of the wanted record, great attention being paid to stylus suitability, record cleanliness, etc. The initial crackle level is reduced with the groove selection, and very occasionally the de-clicking "blanker" facilities of a "Packburn" processor (of which more later). After equalisation, any further tone correction is applied with a graphic equaliser. The tape is played until a click is heard and the machine is stopped. By turning the spools by hand the approximate position of the click is located. The tape is pulled from the machine and laid, recording side downwards, in a shallow groove machined along the tops of two piano keys fixed on a hardwood support. In a space between the keys is a half-track tape replay head (connected

to an amplifier and loudspeaker) fixed with its reproducing "gap" (the actual point of replay) facing upwards to contact the underside of the tape. Above the head a hinged brass flap (actually a brass flap hinge) can be swung so as to cover the tape. It has two felt pads on leaf springs, underneath, which hold the tape down on each side of the head. In the centre is a needle, point downwards, exactly above the head gap but not quite touching the surface of the tape.

By pulling the tape to and fro the click is again located and placed slightly to the left of the replay gap. The tape is then held down onto the left piano key with a finger of that hand. The right hand is used to pull the tape towards the right. It will behave in rather the same way as a well-rosined violin bow, alternately sticking and releasing: with practice it can be made to move in a series of microscopic jumps, and various sounds issue from the loudspeaker. When the click is encountered a louder characteristic "dry" sound (which can be identified with experience) is heard. At this point the flap is pressed down and the needle indents the tape. Heavier pressure on the tape with the left hand will give larger jumps: for accurate work a light touch is required.

The tape is turned over and a scratch, precisely located on the indent, made across half the width of the magnetic oxide coating (which is the actual recording medium) with the corner of a razor blade. High frequencies are recorded near the surface whereas low frequencies penetrate into the depth of the oxide layer: the depth of scratch to be made will thus depend on the type of sound needing removal.

As only half the width of the tape has been treated there is another untreated half which can be used if the first attempt proves unsatisfactory. With practice far greater accuracy than other tape methods, at de-clicking rates of up to 150 per hour, can be achieved.

Digital Audio Tape is a medium which can give virtually perfect reproduction. It has been a reality for several years

now. Professional recording studios and archives are using it extensively but, possibly for commercial reasons, it has been delayed in coming to the attention of the public. In essence the electrical sound signal is converted to numbers (in a manner which will be described later) which are represented electronically. A vast quantity of numbers is needed to do the job properly, and an ordinary tape recorder is quite unable to handle them fast enough. Special digital audio tape recorders have been built but, because video recorders are mass-produced nowadays, it has proved cheaper to arrange the digits in a specially reshuffled way so as to look like a television waveform. The adaptor unit which does this then fools a video recorder into accepting it for recording on video tape. On playback the reverse process restores the sound. Because of the way it was rearranged and coded, any missing bits due to blemishes in the tape coating result in trivial, widely spaced errors, which a computer programme identifies and corrects.

It has the advantage, when used for programme interchange and archiving purposes, that at present it is extremely difficult to edit or change in any way (although, no doubt, this situation will alter): what comes out is exactly what went in.

FORTHCOMING REGIONAL MEETINGS

Newcastle upon Tyne. Saturdays 2.00p.m. at the Activities Room, Science Museum, Blandford Street. September 24th: TALKING MACHINE DAY, by Fred and Cyril Hay, with a special display of Edison items. December 3rd: Traditional MAGIC LANTERN SHOW by Derek and Isobella Greenacre.

Severn Vale. Saturdays 6.30 p.m. at the Foley Arms, Tarrington. August 20th THE EDISON VIDEO, showing by Mike Field. October 15th: OPERATIC PRESENTATION by Don Watson. December 10th: MUSICAL QUIZ by Gilbert Fury.

Midlands. 7.00p.m., University of Aston, Birmingham. August 6/7th: Exhibition by Branch Members at Dudley Show.

Overseas. August 20th: Phonovention at Hotel Doherty, Michigan, 9.00 a.m.

Letters

Dear Peter,

With reference to Mr. Alan Sheppard's letter concerning "Opera at Home", the 1921 edition was priced at 7.6d. The series certainly continued after 1925 and the latest one I have is the Fourth Edition of 1928, described as being "Completely Revised and yet further Enlarged." This copy has "10/6d" pencilled on the flyleaf but as the dust jacket is missing I cannot say if this was the price at the time of issue. I have no knowledge of how long the series continued and some member may well have a later edition.

The Company's "imperishable memory" of Adelina Patti did not survive until 1986, at which time I wrote to them in connection with the proposed sale of the diva's home and theatre at Craig y Nos. My letter did not receive the courtesy of a reply and I can only assume they have no further interest in the singer. Although the ultimate fate of the Castle remains undecided it is still possible that it could become an arts centre of some kind; a decision should be reached within the next few months.

Sincerely, Lawrie Wilson
Hereford, 17th April

Dear Peter Martland,

I have just returned from an 8-day congress of The International Council of Museums in Berlin, the section dealing with collectors of musical instruments. Attending were 43 delegates from far and wide, and the exchange of information was rewarding.

I have an enquiry from the Paris museum for early cylinder recordings of violin music. Were there many? Was the violin more difficult to record than even the piano? Another collection, in Berlin, has some 6,500 instruments, largely ancient African instruments, but some more modern. They were given a load of post-war-one cylinders, which brought to mind the CLPGS, whose tie I was wearing! They also seek early cylinders, and are in touch with several collectors, but would appreciate hearing of any more.

If anyone can help with titles, etc., I would be glad to advise the museums, who can then contact anyone direct. Thank you for airing this request.

Yours sincerely, Frank Holland
The Musical Museum, [REDACTED]
Brentford, Middx. [REDACTED]

Dear Mr. Martland,

I was interested to read the letter from Alan Sheppard in the April issue of "Hillandale News" in which he describes the book "Opera at Home" published by the Gramophone Company in 1925. I was fortunate enough to find a copy of this book at a collectors' fair a few years ago, but even more fortunate was the fact that with it was another book entitled "A Catalogue of Music by International Artistes." This was published as a companion volume to "Opera at Home" and although there is no date of publication, indications are that it was published in 1920. The book has a "soft" back in red, with the "Nipper" trade mark in red, black and gold in a circular frame above the title on the front cover. There are 215 pages in the main part of the catalogue, plus a 40-page, three-part index. What is unique about this catalogue, however, is that it contains photographs, together with pen-pictures printed in both English and French, of no fewer than 86 celebrity artists who had recorded for the company, ranging in alphabetical order from Frances Alda (soprano) to Efram Zimbalist (violinist). In addition, of course, there is a complete list of recordings made by each artist, giving the title, composer, catalogue number, and record size.

As in the case of "Opera at Home", there is no mention of the price, but in the opening titles is a note: "This booklet may be obtained from any accredited 'His Master's Voice' dealer." Perhaps it was given away, free of charge!

May I take this opportunity to congratulate everyone connected with the new-look "Hillandale News", which is a great improvement on its predecessor.

Yours sincerely, John Myers
[REDACTED] 27th April

London Meetings

17th May 1988

GEOFF EDWARDS

by Plum Label

GEOFF EDWARDS is an ex-serviceman, and has acquired a signature-tune, the march "Viscount Nelson", which gave a suitable and shipshape start to his good-humoured programme. It included your reporter's favourite crooner, Al Bowly, with the orchestra of that prince of danceband leaders, Ray Noble. We heard Jack Charman, "Schnozzle" Durante, Jack Hulbert, Tommy Handley in the mirthful and witty "Disorderly Room", and a sketch in which the late, toothy Claude Dampier made his customary reference to "Mrs. Gibson." One only needed a "Grandma Buggins" item from Mabel Constanduros to complete the time reversal to those radio days of forty or more years ago. A happy evening.

21st June 1988

CLEANING UP THE SOUND

by A.O. Leon-Hall

PETER THOMAS is (a) Engineering Services Manager, Outside Studios, BBC Radio; (b) a keen record collector; and (c) a CLPGS member. Together with his colleague Peter Bulley he demonstrated how one extracts the best sound from 78 records, be they perfect copies or veterans damaged by wear, warp, cracks, or locked or jumping grooves. He brought along some of the equipment used, but sadly not the transcription deck he designed. We saw slides of the prototype (built by Mr. Bulley and now in regular use: six more units will be made at a cost of £8,000 each). They will be used by presenters mostly un-technical and often concerned more with entertainment output than with archival value). The turntable can revolve between 55 and 112 rpm. A motor-driven linear pick-up arm answers to instructions sent back from the stylus-tip, enabling the stylus to follow meticulously the most worn and wayward groove.

That machine was not present, but

we did see the magical pick-up arm, since it features on the machine Peter Thomas has created for cylinder transcription, and that machine was brought to Bloomsbury. It is a marvel, and was also built by Peter Bulley. Not a member of the audience still in possession of an eye-tooth would not have traded it for this beautiful machine, lovingly finished to a very high standard.

Mr. Thomas shares with Adrian Tuddenham the rare gift of communicating the most technical point intelligibly to the least technical follower, and by happy good fortune we heard this outstanding lecture just as Adrian's excellent series commenced in our journal. Often they cover the same ground in different ways. Peter Thomas had the advantage of using SOUND to describe sound. He was able to show vividly the principle that good transfers begin long before any electronic wizardry is introduced, simply with the selection of the right size and shape of stylus. A selection of records (music-hall, operatic, dance-band) was played; firstly with too big a stylus, then with one too small, and finally with one of optimum size. We were astonished. One simply had to accept Mr. Thomas's word that not an ounce of filtering or electronic correction had been employed: the selection of the proper stylus alone had resulted in a near hi-fi sound which an "expert" audience did not generally associate with shellac records. When Peter then switched in the Packburn "de-clicker" (another item brought along for us to see) there was further cleaning up of surface noise, but here, clearly, at the cost of some loss of tone, demonstrating a truth of record processing (reflecting life in general, I fear) that you never get something for nothing.

It is a shame that the late appearance of the June "Hillandale" prevented so many members from learning of this fascinating meeting until after it was all over. Space prevents me from doing justice to it. I know it will change the attitude of many of us towards the processing of archive material to long-playing and compact disc. I hope we might persuade Peter Thomas to write for us now and then in this journal.

Record Reviews

RASPBERRIES AND PRUNES

by A.O. Leon-Hall

NOSTALGIA IS BIG BUSINESS now, and few artists of any standing during the 78 era remain unavailable on transfers to LP or cassette. The bad news is that so many record companies engaging in this flourishing trade are motivated, not by the desire to revive interest in an artist, but by the fact that the material is now out of copyright, and free for the taking. The transcriptions often show little evidence of technical care. Marketing techniques are aimed less towards genuine collectors than to department stores and supermarkets, so that requests from this magazine for details of these companies' new releases go unanswered. Thank heavens, then, for BBC Enterprises, who publish Robert Parker's digital stereo records, and who are meticulous in keeping us notified. Robert Parker has caused such a stir with his transfers of early jazz records that many people are unaware of his work in other fields, and we at The Hillandale Building therefore concentrate on bringing that less familiar work to our readers' notice. In April we reviewed the Movie Musicals disc; close by these words you will find notes on a new Fred Astaire collection. But for lovers of the ridiculous the prize will surely be a 7in. single reissue of Jack Hodges' classic "Everything is Fresh Today." The original 78 was played last year on Radio 2 and immediately swept the country as the latest (September 1933) thing, so now Parker has obliged with an excellent transfer in digital stereo. Nobody who treasures (as I do) a good clear copy of Regal-Zonophone MR1046 need go out and buy this since the original already sounds so good, but I thoroughly recommend all others to add this hilarious piece of innocent vulgarity to their collection. As usual Parker uses stereo to create an acoustic and an ambience rather than for wide-screen placement: my VU-meters were wagging wildly in opposite directions but I heard no "artificial" separation coming from the speakers. On the other side is another favourite: Frank Crumit's "Song of the Prune" (B2787, recorded 5/4/28). The cleaned-up sound is worth buying here, despite a somewhat bathroomy acoustic: the 78 has a low recording level and a high degree of surface noise. I was surprised to find the vocal now marred by those "explosions" caused by sounding the letter "P" too close to a microphone. Then listening to the original 78 again I realised they were there, hidden by all the noise. So perhaps the bathroom effect was also there, now revealed for the first time. I am delighted that today's youngsters are taking to these old classics. There is hope for the 'human race after all! (BBC ENTERPRISES 7" RESL 223)

SHALL WE DANCE?
Fred Astaire 1926-1937

by Peter Martland

THIS RECORD APPEARING as it does a few months after Fred Astaire's death provides an opportunity to survey his most creative period - his stage association with the Gershwin brothers and his remarkable 1930s film career. All the great hits are on this disc, "Fascinating Rhythm", "Puttin' on the Ritz", and many more. In my view Robert Parker's transfers from 78s and film soundtrack make Fred Astaire's art leap out at me. It is an impressive achievement, and one that makes Astaire's genius available to new generations.

Fred Astaire began in show business early - he was five-and-a-half years old. With his sister Adele he spent his childhood hoofing around the American vaudeville circuit until, still in their teens, they hit the big-time. They first visited London in 1923, starring in *Stop Flirting*. There followed a series of highly successful musicals harnessing the Astaire's musical and dancing skills to the Gershwin brothers' writing and composing genius. On this disc that period is well represented, revealing an informality and yet a professionalism previously unheard on popular gramophone records.

With his sister married to the son of an English Duke, Fred in the early 1930s tried Hollywood. At his screen test he was tersely rebuffed: "Can't act. Can't sing. Can dance a little." From these unpromising beginnings a remarkable film career was born. That career catapulted his new partner, Ginger Rogers and he to fame, and secured the fortunes of RKO Studios for years. It is from these imperishable films that the bulk of the titles on this record are drawn. The optical soundtracks transfer well, though not uniformly well, to disc, but whatever the limitations the relaxed sophistication of Astaire and the genius of Gershwin, Berlin, and Porter shine through. I was amazed at the opening track, "Shall we Dance?". Astaire's tap dancing seemed to move across my living room floor: the channel separation was superb - as, of course, was the old hooper's dancing. Although this disc must have been in preparation before Astaire's death it is a worthy memorial to a great man whose contribution to the art of dance on stage and screen is without parallel. This record is worthy of attention, and I have no hesitation in recommending it to readers.

BBC ENTERPRISES: L.P. REB665; Cassette ZCF665; Compact Disc BBC-CD665
Shall we dance?(1); Fascinating Rhythm; Crazy Feet; Puttin' on the Ritz; Night & Day; No Strings; Top Hat, White Tie & Tails; Cheek to cheek; Pick yourself up; The way you look tonight; A fine romance; Slap that bass; Beginner's luck; Let's call the whole thing off; They can't take that away from me; Shall we dance?(2)

Book Reviews

THE PAPER DOG

by Joe Pengelly

EDISON DISC RECORD LABELS

by Steven I Ramm

An Illustrated Guide to Edison Disc Record Labels by Stephen A. Sylvester, 1985: softbound. Available from Tricia Rae Enterprises, [REDACTED] Houston, Texas 77274, USA: \$12.95 post paid.

HERE IS A BOOK which has been around for three years but with only a limited distribution. I was surprised it was never advertised in any of the collector publications. This review will, at least, document its existence in the (limited) number of reference books for pre-1930 record collectors.

This very thin book consists of black and white photographs of Edison Disc Record Labels, all of which are from the author's collection. Except for the Sample Record all labels shown were commercially available. The labels are divided into two types: etched and paper, and then into the variations which appeared. Each of the 15 labels is given a full page. Differences such as the border shapes are noted, as are similarities. Each label is given a date of issue by year ranges (i.e., 1919-21). Apparently these dates were obtained by the author by using record numbers.

The book contains a Selected Bibliography and Additional Readings (I'm not sure of the difference between these two). Only six references are given and most collectors own "From Tin Foil to Stereo" and "The Fabulous Phonograph". The obvious omission is Ron Dethlefsen and Ray Wile's excellent book on Edison Discs and Disc Artists, which was published a few years ago. (Wile's listing of Edison disc records is given). This book is mentioned as an Addendum to the Preface but the correct title, as well as authors and publishing information, is not given. In fact Ron and Ray's book covers much of the information in this book and more. Because of their access to the Edison Site files, there is better documentation.

At \$12.95 this book will probably have limited distribution. I also feel it has limited usefulness since the Dethlefsen and Wile book provides more information in one place. If only collectors would coordinate research projects such duplication and overlap would not exist and the output would be more useful.

One sidelight: Mr. Sylvester gives credit to the Houston Museum of Natural Science which has a collection of Edison Long Play Records. Phonograph and record collectors visiting that part of the country may want to see what else they have to offer, as I have never seen this collection mentioned elsewhere.

IN THE RECORD COLLECTING FIELD from time to time there appear publications that are little gems. Such a one is Michael W. Sherman's "The Paper Dog." It is an illustrated guide to 78 rpm Victor record labels from 1900 to 1958 and, although it runs only to some forty-four pages, what quality pages they are, both as to the quality of paper used and the content. Consequently the labels illustrated - well over a hundred, and many in colour - are superb, and include even a plaid label!

Those who are lucky enough to possess American 78 Victors are aware of the superior mix of shellac of which they are composed, giving a much quieter surface than their equivalent issues elsewhere in the world. In many cases this is because wartime issues, especially, were composed of a mix derived from the salvage of 78s, in which there was a residue of small metal fragments consequent on the salvaged discs having been played with steel needles. Consequently I hear things with less surface noise from my Victors and, because of this, can even hear from time to time the tap of a conductor's baton on his podium before the start of a work.

Having "trumpeted" the excellence of 78 American Victors and, hopefully, encouraged 78 buffs to seek them out, Michael Sherman's monograph is an essential "must". The involvement of top American researchers like Bill Moran, Bill Bryant, and Tim Brooks is a sure fire endorsement of the scholarship that has gone into this work.

The massiveness of the 78 Victor record industry even only in the first forty years up to 1941 - and with seventeen years to go - is underlined by a table showing that the issues then ran to an incredible 800,000,000! So if you want to research and date the provenance of 78 Victor labels, Michael Sherman's "Paper Dog" is the essential tool you need. But if yours is only a curiosity interest then you may still wish to see Nipper as a puppy or as Francis Barraud never saw him - in mirror image.

THE SOCIETY would like to acknowledge receipt of **DE WERGEVER**, journal of the Netherlands Gramophone Society; Secretary Lenie Swart-Mulder, [REDACTED] AMSTERDAM, Holland.

And also **GILBERTIAN GOSSIP**, a privately published review of Gilbert and Sullivan topics, and of professional and amateur productions of G&S and other light operas in Great Britain. Correspondence to Michael P. Walters, c/o British Museum, Tring, Herts., England.

Endurance Test

by Ted Cunningham

FOUR O'CLOCK in the morning and here I lie in pitch darkness worrying about something I saw in the February Hillandale News. It was about the Blue Amberol. How did it go again? "During the tests to which it was subjected before being announced, it was played three thousand times, and a careful comparison between the first and three-thousandth performances detected absolutely no difference." It didn't strike me at the time, but it does now, hard enough to wake me from a deep slumber. Because, you see, if you play a 4-minute cylinder 3,000 times the operation will take 12,000 minutes, which is 200 hours. Add to this the time it takes to return the speaker arm to the beginning: that alone (five seconds, say?) repeated 3,000 times makes a further 4 hours and 10 minutes.

No doubt someone or other has researched the daily routine at West Orange, and the regular working hours, but I'm hanged if I'm getting out of bed to start hunting out reference books at this hour of the night. Instead let us assume that the Edison establishment worked Monday to Friday from eight in the morning until six o'clock at night, taking half-an-hour for lunch, and Saturdays from eight until one-o'clock, so as to allow everyone to get to the ball game. Sundays would, of course, be free: that makes a 52½-hour week. So if they started testing the Blue Amberol first thing on a Monday, they went on testing it for virtually four whole weeks, finishing up at 5.10 p.m. on the fourth Friday.

The advertisement said "Tested by Mr. Edison, its famous inventor . . ." but somehow I can't believe the great man would have felt it necessary to undertake this vigil in person. No, no; he would have delegated this job. And although I visualise the test beginning and ending with stern bespectacled men in white coats, flourishing clipboards and solemnly comparing the first playing with

the 3,000th, I cannot see them all hanging around the laboratory, drumming their fingers, every day of those long intervening weeks.

The task would have been given to a junior employee, an enthusiastic and dedicated youngster called Chuck or Lem. No; Jake. Jake would have been deputed to come in each morning and set the test going, and keep it going till nightfall. Now, which cylinder was chosen for testing? It must have been one of the first few Blue Amberols to be issued. Was it Grace Kerns singing "Roses Bloom for Lovers"? Cal Stewart with "Town Topics of Punkin' Center"? Let us say it was the bell solo, "Light as a Feather", by Charles Darb. Picture if you will young Jake conscientiously playing this record some fourteen or fifteen times every hour throughout the working day, day after day after day. Picture him now on the Thursday, his enthusiasm and dedication at a very low ebb, his liking for bell solos shattered for ever. Given the opportunity he would cheerfully murder Charles Darb. During the second week his behaviour-pattern undergoes a dramatic transformation. Known through the length and breadth of West Orange as "Good-tempered Jake", he begins to display an unaccustomed surly and aggressive nature. In a moment of desperation, his winding arm wracked with cramp and fatigue, he hurls the accursed cylinder to the hardwood floor. To his chagrin it lies there, infuriatingly intact, "to all intents and purposes indestructible." By the third weekend his eye is wild, his hair greying and falling out in handfuls. He is given to laughing aloud for no apparent reason. When the clipboard men eventually return to make their final assessment of the new product they are not the only ones wearing white coats, and poor Jake is borne away gibbering helplessly.

No progress is made without cost, but I feel sorry for Jake, if that was really his name. If anybody should visit Newark, or Pompton Lakes, or Hackensack, New Jersey, and meet a very, very old man who, at the sound of a door-bell chime, tends to roll his eyes and grind his teeth, give him a kind nod from me, won't you?

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THE INTERNATIONAL MILITARY MUSIC SOCIETY meets quarterly in the London with branches in UK and overseas. Regular magazine, SUBSCRIPTION (UK) £5 p.a. Details from: Mrs. R. Griffiths, [REDACTED]

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MEMORY LANE is a lively magazine covering the music scene of the 1920s, 30s and 40s. The emphasis is placed on British dance bands and vocalists, the magazine also covers American jazz, big bands, music hall and variety, etc. Memory Lane incorporates the official Al Bowlly Society. Published quarterly each edition includes articles by leading journalists and writers, picture pages, readers' letters, record & book reviews & discographical information. A "must" for 78 rpm collectors and enthusiasts. Annual subscription £5.00 (£6.00 overseas). Sample copy £1.00 post paid. (If remitting from abroad, please send British Sterling). Alternatively, a S.A.E or I.R.C. will bring further details. MEMORY LANE, [REDACTED]

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B O O K S H E L F

additions to the 1987 Book list new items not listed.

B144 Encyclopaedia of Automatic Musical Instruments. — over 1000 pp
£35.00

B145 Gramophonen Platten Aus Der Ragtime Era — Rainer Lotz — 212pp
£5.75

B146 Paper Dog — Micheal W Sherman (reviewed in April 88 HD) (USA)
£5.50

B147 The Edison Phonograph (Reprint Facsimile Catalogue c1910 USA) 36pp
£2.25

B148 The Phonograph (Edison) (Facsimile Reprint 1900 USA) 52pp
£2.25

More new factored items will be added in due course and announced in this magazine

CORDEX BINDERS:

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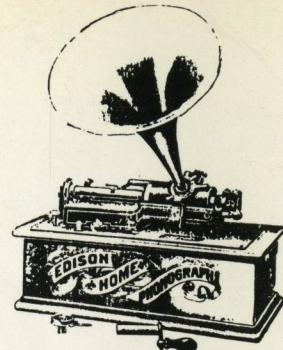
B128 Abbey Road, (Story of EMI studios) only £3.00 while stocks last.

The Book Shelf move has now been completed and all orders should be sent to 46 Railway Terrace Rugby CV21 3EX England. Callers will normally be welcome between 9.30am — 12.30pm and 2pm — 5pm Mondays to Fridays.

In order to maintain some old titles and various record catalogues available to members, we shall be producing a list in the next issue of Hillandale News of titles available as 'on demand' items.

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